



Entire UT System to join edX

UT hopes to offer at least four edX courses by Fall '13

By Ethan A. Solomon

EXECUTIVE EDITOR

The University of Texas system — nine universities, six health centers, 212,000 students and 19,000 faculty — announced yesterday it would join edX, the MIT-pioneered online learning platform and university consortium. The move sextuples the number of institutions involved with edX, from three to eighteen, and bolsters MIT's efforts to make online technology a staple of university education.

The UT system will also contribute \$5 million to edX, a non-profit corporation headed by former CSAI director Anant Agarwal. The contribution is much less than those of the founding edX partners — MIT and Harvard each contributed \$30 million — but more than University of California, Berkeley, which contributed no funds but promised technical assistance in developing the platform.

In a press conference on Monday,

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A construction crew demolishes the building at 219 Vassar St. on Monday morning. The TCC Vassar childcare facility will be constructed in its place.

Demolition begins at 219 Vassar

The demolition of the building at 219 Vassar St. began yesterday and is set to conclude by Nov. 15. The site will house the new TCC (Technology Children's Center) Vassar daycare, which is slated to open by next August.

Simmons Hall residents can expect noise during work hours from 8 a.m. to about 4 p.m. every weekday, said Dick Amster, director of campus planning, engineering, and construction.

While some weekend work is possible, Amster "doesn't believe it is anticipated."

Work will begin on the far side of the site, so hopefully "the building should shield Simmons from the noise as we get started," said Amster. Residents can also expect increased truck traffic on Vassar St. as a result of the demolition.

In an email to the official Simmons list, Ellen Essigmann

PhD '80, Simmons housemaster, mentioned that the north sidewalk of Vassar might be closed for the duration of the construction. While there may be times when it has to be closed, "the goal is to keep it open," assured Amster.

Demolition is scheduled to finish by Nov. 15, after which Facilities will begin to remove soil

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More than just people on ballot

Questions on marijuana and assisted suicide

By Anthony Yu

STAFF REPORTER

Even though Massachusetts will mostly likely vote Democrat in the upcoming presidential election, there are three statewide ballot questions that could change current laws and affect MIT students.

If enacted, Question 1 would require car manufacturers to provide independent car repair shops and owners with the same vehicle diagnostic and repair information currently available to dealerships. The information must be included for new cars sold from 2015 onward. For older vehicles, manufacturers would be allowed to sell the repair and diagnostic information. Supporters of the law argue that car owners have the right to know how to fix their own vehicles, adding that the law would lower prices by increasing competition among dealerships and independent repair shops. However, the opposition argues that independent

Ballot questions, Page 9

Fisher v. UT affirmative action case oral arguments heard

How can the 'diversity' of a university be evaluated?

By Leon Lin

STAFF REPORTER

Last Wednesday, the U.S. Supreme Court heard the oral arguments from both sides of *Fisher v. University of Texas*, the affirmative action case for which MIT and 13 other universities, including the eight Ivy League schools, filed an amicus curiae brief defending the right of a university to consider the race of an applicant, among other factors, in its admissions process.

In *Grutter v. Bollinger* (2003), the Court upheld an admissions policy of the University of Michigan Law School, ruling that a diverse student body was a compelling interest that allowed the use of race in an admissions process so long as that use was "narrowly tailored" to obtaining the "critical mass" of minority groups on campus necessary for the kind of diversity that would enhance a school's educational environment.

Diversity as an admissions goal

"Because we know that students learn quite a lot from each other, we want to bring to campus students who will add to the entire campus learning environment," Stuart Schmill, Dean of Admissions, wrote in an email to *The Tech*. "This also means bringing together students from different backgrounds."

Justice Samuel A. Alito noted in the oral argument that while the respondents argued for the benefit of diversity, they did not emphasize the goal of helping underprivileged students.

Evaluating a university's diversity

"The educational benefits of diversity and the degree of diversity necessary to obtain those benefits defy easy calculation," MIT's joint brief to the Court admitted.

Bert Rein, the lawyer of petitioner Abigail Fisher, a white student denied admission to the University of Texas, argued that even under the framework of *Grutter*, the University of Texas had neither demonstrated the necessity of using race as a factor in admissions nor provided a well-defined goal to which its policies could be "narrowly tailored." Rein suggested that the University of Texas might have gone too far.

Justice Sonia M. Sotomayor asked Rein when he thought the university had reached a sufficient number of blacks: "Pre-*Grutter*, when the State was indisputably still segregating, it was four percent. Today, under the post-*Grutter* system, it's six percent. The two percent increase is enough for you, even though the state population is at 12 percent?"

"It's not our burden to establish the number," Rein said.

Several of the justices pressed the same points during the argument from Gregory G. Garre, who represented the University of Texas. "When will I know that you've reached a critical mass?" asked Chief Justice John G. Roberts.

The university did do a study in which they asked minority students about their classroom experiences. "In looking at the

Fisher, Page 12

IN SHORT

The deadline to register to vote is Wednesday, Oct. 17. Students can register to vote in Massachusetts every day from 11 a.m. to 3 p.m. in Lobby 10 using their MIT address.

A memorial commemorating the late Alice H. Amsden, MIT political economy professor, will take place this Friday and Saturday on the sixth floor of the new Media Lab. For more details and registration, visit <http://amsden.mit.edu>.

It's Hunger Week! Join MIT Fighting World Hunger and local restaurants to fight local hunger. Part of your payment at Cosi today, the Friendly Toast on Wednesday, and Veggie Galaxy on Thursday will be donated to the MIT Soup Kitchen, Rosie's Place, and Boston's Pine Street Inn. Visit their booth in Lobby 10 for more info!

An all-clothing Choose to Reuse event is this Thursday. Drop-off begins at 8 a.m. in Stata's big white lobby, and pick up is from 11 a.m. to 1 p.m.

Send news information and tips to news@tech.mit.edu.



Sam Heilbronner performs with the Festival Jazz Ensemble in the Annual Family Concert, a joint concert held with the MIT Wind Ensemble in celebration of Family Weekend, last Friday.

IMAGINARY FISH

Studying marine communities through computer models.

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TO VOTE OR NOT TO VOTE?

Pondering our civil duty. OPINION, p. 4

STATE OF THE RACE

Yost and Edelman consider the recent debates. OPINION, p. 5



VIDEO FEATURE: FAMILY WEEKEND

Families reflect upon their weekend at MIT.

HOW'S THE CITY THESE DAYS?

Changing the time from orientation had drastic effects.

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Strict rules behind debate's looser town hall format

The format for the second presidential debate is designed to be a little less stiff—a free-flowing question-and-answer session between the candidates and a studio audience.

But behind the scenes, little is left to chance.

There are 80 participants, culled by Gallup, the polling firm, from a sample of uncommitted voters who live near the debate's location in Hempstead on Long Island. On Tuesday morning, they are scheduled to arrive at the site to begin rehearsals with the moderator, CNN's Candy Crowley. They will have prepared questions to ask but will not use them during the prep session. To preserve as much secrecy as possible, they will rehearse with dummy questions.

Crowley will select the participants to call on during the actual debate, which she will determine by reviewing their questions beforehand. The campaigns are not allowed to screen any of them.

There are strict time limits and rules. After the audience member asks a question, his or her microphone will be immediately shut off. The candidate will have two minutes to answer. The other candidate is then given two minutes to respond. Then the moderator will be able to pose a follow-up question of her choosing, with each candidate allowed one minute to respond.

—Jeremy W. Peters, *The New York Times*

After epic jump, daredevil lands on his feet

ROSWELL, N.M. — A man fell to Earth from more than 24 miles high Sunday, becoming the first human to break the sound barrier under his own power.

The man, Felix Baumgartner, an Austrian daredevil, made the highest and fastest jump in history after ascending by a helium balloon to an altitude of 128,100 feet. As millions around the world experienced the vertiginous view from his capsule's camera, he stepped off into the void and plummeted for more than four minutes, reaching a maximum speed measured at 833.9 miles per hour, or Mach 1.24.

He broke altitude and speed records set half a century ago by Joe Kittinger, now 84, a retired Air Force colonel whose reassuring voice from mission control guided Baumgartner through tense moments. Early in the jump, Baumgartner began spinning out of control. But as the atmosphere thickened, Baumgartner managed to fall smoothly until he opened his parachute about a mile above ground and landed in the New Mexico desert.

"Trust me, when you stand up there on top of the world, you become so humble," Baumgartner, 43, said after landing.

—John Tierney, *The New York Times*

Supreme court to hear case on Arizona voter registration

WASHINGTON — The Supreme Court on Monday agreed to decide whether Arizona may require proof of citizenship in order to register to vote in federal elections. The federal appeals court in San Francisco had blocked the state law, saying it conflicted with a federal one. The Supreme Court will hear arguments in the case early next year, and the law will remain suspended in the meantime.

The state law requires prospective voters to prove they are citizens by providing copies of or information concerning various documents, including birth certificates, passports, naturalization papers or Arizona drivers licenses, which are available only to people lawfully present in the state.

The federal law, the National Voter Registration Act of 1993, allows voters to register using a federal form that asks, "Are you a citizen of the United States?" Prospective voters must check a box for yes or no, and they must sign the form, swearing they are citizens under penalty of perjury.

—Adam Liptak, *The New York Times*

Pakistani girl in Britain for care after shooting

By Declan Walsh

THE NEW YORK TIMES

ISLAMABAD — When the time came to choose medical treatment for Malala Yousufzai, the 14-year-old Pakistani schoolgirl who defied the Taliban and then was gunned down by them, her family and doctors faced a world of possibilities after a global outpouring of advice and offers of assistance.

Whatever they chose, a medical jet from the United Arab Emirates was waiting to take her to hospitals abroad. Pakistani and U.S. officials had talked about arranging treatment for her at the giant U.S. military hospital at Landstuhl, Germany.

A well-developed offer came from former Rep. Gabrielle Giffords and her husband, Mark E. Kelly, who had gone through their own treatment ordeal after she was shot in the head last year. They had gone as far as to line up a noted neurosurgeon and had even arranged a transportation option of their own to the United States—with a television celebrity offering

to quietly foot the fuel bill.

Those were among dozens of offers from across the world. But when the time came to fly the wounded schoolgirl out of Pakistan, in the early hours of Monday, a deal from Britain to accept Malala at a specialized hospital in Birmingham proved hard to beat.

Worried that the Taliban would fulfill their promise to take a second shot at the teenage activist, the dawn run from the military hospital in Rawalpindi, Pakistan, to the airport was shrouded in secrecy, said Rehman Malik, Pakistan's interior minister.

"I directed the airport staff to remain incognito, because there was an alert, threats from the Taliban that they would kill her," he said. "We were very careful."

When the Emirati jet carrying her and a team of doctors landed in Birmingham on Monday afternoon, most agreed that the decision made both medical and diplomatic sense.

Britain and Pakistan have a long history stretching back to British rule on the subcontinent;

doctors at the hospital, the Queen Elizabeth II Memorial Center, have treated hundreds of British soldiers wounded in fighting against the Taliban in southern Afghanistan.

"We do, unfortunately, have a considerable expertise in treating that sort of bullet injury," Dr. David Rosser, the hospital's medical director, told reporters.

Pakistani, British and U.S. officials took pains Monday to emphasize that the final decision about Malala's treatment had been based on medical grounds above all else.

"We never saw this in a political light," one senior U.S. official said on the condition of anonymity. "This was a humanitarian story, not a political one."

Yet there was little doubt that each of the possibilities, especially given the diplomatic tensions between Pakistan and America, carried their own political risks.

Initially, Pakistani officials had approached the U.S. Embassy for help, officials from both countries said.

Romney campaign makes pitch for ad barrage

By Ashley Parker
and Nicholas Confessore

THE NEW YORK TIMES

Mitt Romney and the Republican Party have begun a late push to raise tens of millions of dollars in the closing weeks of the election, cash that will finance a last-minute barrage of advertising that Romney's aides believe is critical to beating President Barack Obama.

In an email to top donors and fundraisers on Monday afternoon, Romney's campaign said that it had raised \$170 million in September, almost as much as the near-record \$181 million raised by Obama, but the campaign added that it needed to bring in even more money in October to capitalize on Romney's surge in polls in swing states like Florida and Ohio.

The announcement opened a three-day retreat for donors at New York's Waldorf-Astoria hotel, where

the campaign is seeking to tap into a burst of enthusiasm among formerly jittery donors—who were energized by Romney's strong first debate performance—to recruit new donors and persuade old ones to give the maximum allowed by law. Big donors will also spend part of the retreat working the phones in a miniature call-athon intended to wring out as many last-minute dollars as possible.

Romney had considered making a quick appearance at the retreat, but ultimately decided to stay in Boston to prepare for Tuesday night's debate on Long Island. Quietly, his donors had been sending the message to his finance team: They would love to see Romney, but three weeks from Election Day, they felt his time was probably better spent practicing for his face-off with Obama or hitting the campaign trail.

The Romney campaign's broad

effort will be an experiment in last-minute high-dollar fundraising by a presidential campaign, one made necessary by Romney's decision to forgo public financing and the threat posed by the millions of small donors supporting Obama, who similarly opted out of public financing.

Those small donors have flooded Obama's campaign with a steady stream of money with little investment of the president's time and energy, allowing him to focus more heavily on retail campaigning in recent weeks. While Romney's fundraising has kept roughly on pace with Obama's since the beginning of the summer, his dollar totals lean more heavily on large checks to the Republican National Committee, which must pay higher rates for political advertising and is allowed to spend only a limited amount on ads coordinated with Romney's campaign.

WEATHER

Gorgeous fall weather in the week ahead

By Shaena Berlin
STAFF METEOROLOGIST

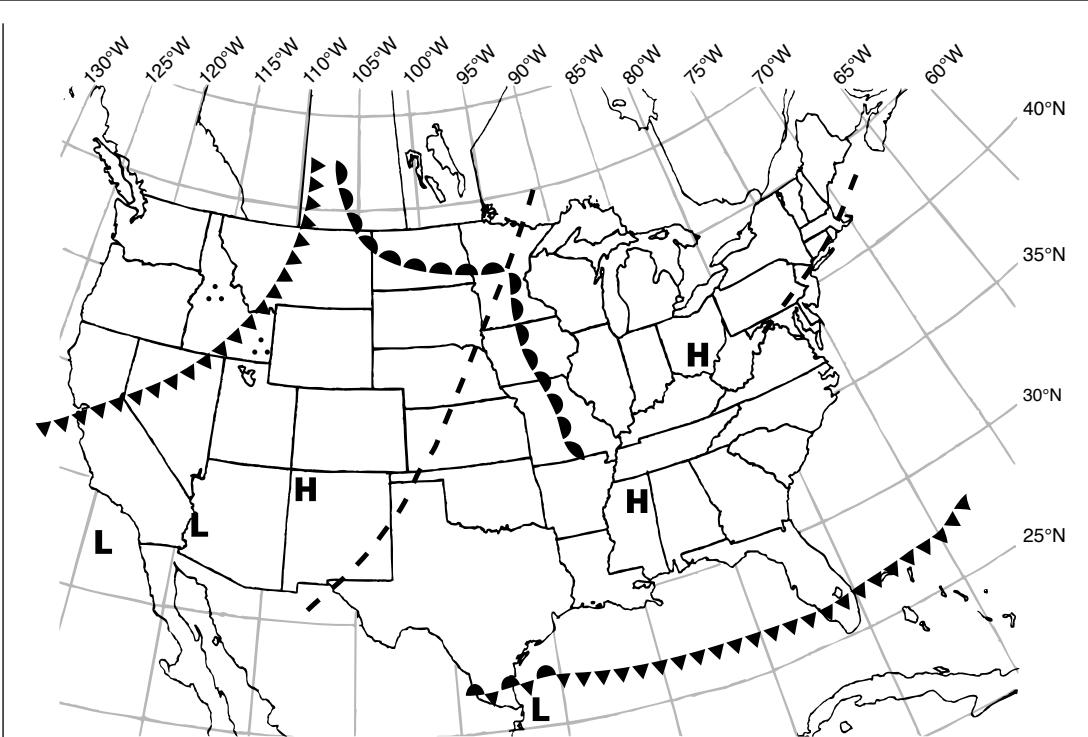
The next few days in Cambridge will display lovely fall weather, with clear skies and temperatures mainly in the 50°s F. Autumn foliage is in full color, so be sure to look outside. This weekend will bring another low pressure system through the area with its corresponding precipitation and wind, but models so far show

a quick passage; most likely for at least part of the weekend it will not rain.

Signs of winter continue to advance. Last weekend, it snowed in Maine, just 200 miles north of Boston. However, the NWS Climate Prediction Center anticipates above-average temperatures and average precipitation for the region this winter, so perhaps Boston will experience another mild winter.

Extended Forecast

Today: Cloudy in the morning, then clear. High near 56° F (13°C). W wind at 15-20 mph.
Tonight: Clear, with W winds near 10 mph. Low around 40°F (4°C).
Tomorrow: Sunny with a high near 62°F (17°C). Low around 48°F (9°C). SW winds at 5-10 mph.
Thursday: Clear in the morning, then cloudy. Warmer. High around 68°F (20°C). Low around 55°F (13°C).



Situation for Noon Eastern Time, Tuesday, October 16, 2012

| Weather Systems | Weather Fronts | Precipitation Symbols | Other Symbols |
|-----------------|-----------------------|-----------------------|---------------|
| H High Pressure | - - - Trough | Snow Rain | Fog |
| L Low Pressure | ▲▲▲▲ Warm Front | Showers ▽ △ | Thunderstorm |
| § Hurricane | ▲▲▲▲ Cold Front | Light * . | Haze |
| | ▲▲▲▲ Stationary Front | Moderate ** .. | |
| | | Heavy *** :: | |

Compiled by MIT Meteorology Staff and *The Tech*

Sept. 11 war crimes case resumes at Guantanamo Bay

By Charlie Savage
THE NEW YORK TIMES

FORT MEADE, Md. — The Sept. 11 war-crimes case before a military commission at Guantanamo Bay, Cuba, resumed relatively smoothly Monday as five men accused of being co-conspirators in the attacks were calm and cooperative in the first session of a weeklong pretrial hearing. Khalid Sheikh Mohammed, the self-described mastermind of the Sept. 11, 2001, attacks, and the other four defendants each spoke directly — some through a translator — with the judge, Army Col. James L. Pohl. The atmosphere on the first day contrasted sharply with a chaotic arraignment hearing in May, when they refused to answer the judge's

questions.

On Monday, when the judge asked each whether he understood his right to decide not to attend sessions of the commission — and that choosing to stay away could damage his defense — each replied to him. "Yes, but I don't think there is any justice in this court," Mohammed said.

The military installed small speakers that quietly broadcast a simultaneous Arabic translation near the seats of the five defendants. In May, the five men refused to wear their headphones, forcing translators to repeat every utterance in Arabic over courtroom loudspeakers, further slowing the proceedings.

Monday's session began a hearing of pretrial motions scheduled to

last through the week at the high-security courtroom erected at Guantanamo for the long-delayed trial. The proceedings were shown to reporters at the base and those watching via a closed-circuit feed at Fort Meade outside Washington. The remote feed had a 40-second delay, giving the military the option of censoring any statement it deemed to include classified information. The change from the chaotic May session was apparent early as two co-defendants, Mustafa Ahmad al-Hawsawi and Ramzi Binalshibh, spoke through translators directly with Pohl when he asked about a possible conflict of interest in al-Hawsawi's defense team, which included Navy Cmdr. Suzanne Lachelier, who had represented Binalshibh several years ago.

European Union intensifies sanctions on Iran

BRUSSELS — The European Union toughened sanctions against Iran over its disputed nuclear program Monday, banning trade in industries like finance, metals and natural gas, and making other business transactions far more cumbersome.

The measures were the latest in a long series of sanctions from Europe, the United States and the U.N. Security Council, and were evidence of the worsening damage to Iran's economy.

In a joint statement, EU foreign ministers, meeting in Luxembourg, expressed "serious and deepening concerns over Iran's nuclear program." They added that in continuing to enrich uranium, despite Western concerns that it is aiming for a bomb, Iran was "acting in flagrant violation of its international obligations."

Ahead of the meeting, Catherine Ashton, the European Union's foreign policy chief, said: "We want to see a negotiated agreement. But we will continue to keep up the pressure."

Ashton represents six major powers, including the United States, in nuclear talks with the Iranians. There have been five rounds of discussions since late 2010, the last of which ended in frustration in June. Ashton said the major powers would keep in contact with Saeed Jalili, Iran's negotiator, to assess when to convene another meeting.

The new European sanctions were necessary as a result of a "continued failure to satisfy the world that the program was for peaceful purposes," said William Hague, the British foreign secretary.

—James Kanter and Thomas Erdbrink, *The New York Times*

Economists call delaying aid for Spain risky for Europe

MADRID — It has become Spain's version of Godot: waiting for Rajoy.

For various reasons, Mariano Rajoy, the country's prime minister, has deferred seeking help from a financial assistance program that Europe has tailored to Spain's needs. Many economists, analysts and business executives here are increasingly worried about the costs of further delay.

They warn that waiting to seek aid, and the uncertainty it engenders, threaten to push the economy deeper into recession. And that, they say, could increase the ultimate cost to Spain and Europe if the aid eventually needs to be granted under crisis conditions.

As long as Spain's borrowing costs remain below six percent, as they have since the European Central Bank said it would buy the country's bonds if asked, the Rajoy government might seem to have no reason to rush. But the downgrade of Spanish debt to near junk status last week by Standard & Poor's underscored the fragility of the country's finances.

—Landon Thomas Jr., *The New York Times*

Student debt relief changes to aid well-off most, study says

By Andrew Martin
THE NEW YORK TIMES

With nearly 1 in 6 student loan borrowers in default, the federal government is making changes to its income-based repayment plan to help borrowers with relatively high debt and low incomes keep up with their payments.

But a report that will be released Tuesday by the New America Foundation, a nonprofit and nonpartisan policy institute, says the changes ultimately will provide only marginal help for low-income

borrowers who are at the greatest risk of default.

Rather, the changes would provide big benefits to middle- and high-income borrowers, particularly for those seeking a graduate degree, the authors found. The report says that at least one financial planning company is telling law school students that the changes could allow them to write off \$100,000 in student debt.

"If left unchanged, the program is set to provide huge financial windfalls to people who, far from being in need, are among the most

financially well-off graduates in today's job market," the report says.

Asked about the report, Justin Hamilton, a spokesman for the Education Department, said in a statement that income-based repayment "isn't necessarily right for everyone, but it can be an incredibly helpful resource for people struggling to manage their student loan debt."

Because payments are based on a percentage of income, borrowers with low incomes can conceivably pay nothing each month and still remain current on their loans.

This space donated by *The Tech*

"...magnificently blends the essence of jazz, pop, Indian classical..." - Hindustan times
"...thinks in ragas instead of chords..." - The Hindu
"...Tucker's fusion gives the classical tunes space to breathe..." - Indian Express

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The Association for India's Development MIT and Boston chapters
in collaboration with IndianRaga present:

Shankar Tucker Live In Concert

Featured vocalists: Rohini Ravada and Rohan Kymal

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Proceeds support grassroots projects in India and the fight for justice in Bhopal.
For more details contact: icjb.us.ab@gmail.com



WORLD & NATION

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GUEST COLUMN

Our civil duty not to vote?

By Tomer Mangoubi

As November 6 approaches, we once again hear the calls of political activists insisting that it is not only our right but our responsibility to vote in the upcoming election. We Americans take this oft-repeated mantra as a given, as a basic necessity of an effective government. But seeing that even informed voters have an amateur understanding of the issues facing the country, are we really in a position to decide which policies should be enacted on a national scale? Does the electorate understand the issues on which it votes?

The economy, the basic problem of putting bread on American tables, will be the deciding factor for most voters this year. To spare us the trouble of finding statistics for ourselves, President Clinton generously summarized the nation's finances for us at the Democratic National Convention: "Since 1961, for 52 years now, the Republicans have held the White House 28 years, the Democrats 24. In those 52 years, our private economy has produced 66 million private-sector jobs. So what's the job score? Republicans: 24 million. Democrats: 42." It does not take a skeptic to realize that Clinton's "job scores" are subjective at best and pulled out of his rear-end at worst. How can one measure which administration created which jobs, especially when these are "private-sector jobs" not directly created by the government? Yet it is commonplace for politicians, analysts, and voters to conclusively link policies to job creation.

There are two primary problems with this approach. First, we cannot know how long economic policies take to have an effect. Are the prosperous years during Clinton's term a result of his own work or of Bush Sr.'s? Surely a policy meant to affect 300 million Americans might take more than 4 years to have a measurable impact. Second, we must consider all external economic factors when measuring a policy's outcome, especially in today's global economy. That means considering economic

developments in Europe, natural disasters like Hurricane Katrina, and game-changing inventions like the Internet. Maybe Bush is to blame for the housing bubble or maybe Barney Frank is, but neither can be faulted for the debt crisis in Greece or the fall of the Euro (though Gore can definitely be credited for inventing the Internet). Seeing how immensely complicated it is to evaluate the effect of an economic policy, it is better for the informed, but not expert, voter to refrain from making an ill-informed decision based on the economy.

We must vote to ensure the accountability of our representatives and prevent government corruption.

Foreign policy is another major issue Americans vote on. There is a general consensus in our media: Republicans compromise on civil rights to fight terror, and Democrats are soft on terror to protect civil rights. Consider the outcry when Obama bent his waist a little too low and bowed to Saudi king Abdul-Aziz. Accusations of Obama sympathizing with Arab regimes abounded. Three years after the fact, the Romney campaign still maintains that Obama "bows to foreign dictators." In reality, however, both the Bush and Obama administrations have been strong supporters of the Saudis for the simple reason that they are a balancing force against Iran. Symbolic acts aside, Democrats and Republicans share the same general attitude towards Middle Eastern allies and enemies.

On the flip side, Bush was widely criticized for compromising civil rights when he instituted the notorious PATRIOT Act that greatly expanded the government's ability to wiretap phones. Obama, however, quietly extended the PATRIOT Act without so much as a peep from the media. Furthermore, most Democrat and Republican congress-

men supported the wars in Afghanistan and Iraq when they were first waged. By 2008, the parties had reversed directions and both presidential candidates advocated for withdrawal from these conflicts. Their plans differed: Obama's put more pressure on an immediate withdrawal and McCain wanted a more flexible timeline, but their primary aims were the same. Thus, while Democrats and Republicans differ with regards to international politics, they diverge on details but not on primary goals. An expert is needed to judge between their policies and not an informed, intelligent, but still amateur, voter.

In fact this is true for most political issues on which voters base their decisions. The Congressmen themselves often do not read the bills they approve in full because they are too long and technical for anyone but an expert in the field to understand. Certainly we voters cannot effectively judge between nuanced policy distinctions when even our representatives cannot. In fact, when we vote on a highly complex issue that we do not understand, we may as well be flipping a coin. Our choice is rendered even more arbitrary because representatives do not always read the bills they pass. Finally, candidates often reveal only what they plan to accomplish once elected but not the details of how they plan to do it, introducing even more randomness into the democratic process. In this sense casting a ballot is more like playing a game of Russian roulette than making a valued contribution to a time-honored civil process. The choice we make is random but the consequences may be drastic.

Even in its imperfect form, voting nevertheless serves some useful purposes. We must vote to ensure the accountability of our representatives and prevent government corruption. We can also choose to vote only on issues that we personally understand at an expert level. If we vote based on issues on which we have a truly expert understanding, then we can reduce the randomness of the democratic process and perhaps salvage the effectiveness of our vote.

STATE OF THE RACE

What's in a debate?

What's a town hall debate? A spin room?

By A.J. Edelman

STAFF COLUMNIST

Debates are like a circus. There is promotional advertising, the grand performance, and then afterwards, you exit through the gift shop, designed to give you the impression that what you just watched was immensely entertaining and gratifying.

Many Americans who tune in to watch a debate are unaware of just how multifaceted a debate is. In today's era of politics a debate is as much about what happens before and after the candidates speak as what happens during the debate itself. In the following piece I will provide an overview of most of the process of what goes into a debate. (While I focus on presidential debates, the same criteria hold true for de-

bates for most political offices.)

Planning

Candidates aren't bound to debate by law. It is customary for the nominees of the two parties to draft an agreement agreeing to the terms and formats of the debates. It should be noted that while this is a private

Debates, Page 5

CORRECTIONS

An interactive for last Friday's article about MIT's endowment incorrectly showed Stanford's 2012 endowment at \$19.7 billion with a 19 percent increase in FY 2012. It is actually \$17.0 billion, having increased by 3 percent.

The article associated with the interactive stated that "just over half" of MIT's 2012 operating revenues came from research

grants. For clarification, MIT's operating revenues as listed in the Report of the Treasurer include revenues that support Lincoln Laboratory and the MIT-Singapore Alliance for Research and Technology.

Last Friday's review on *Banksy: You Are an Acceptable Level of Threat* incorrectly named Gingko Press as the publisher. The book is published Carpet Bombing Culture, and is distributed by Gingko Press.

OPINION POLICY

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Research Day One:

Klein Bottle: C

Open Container Law: 1

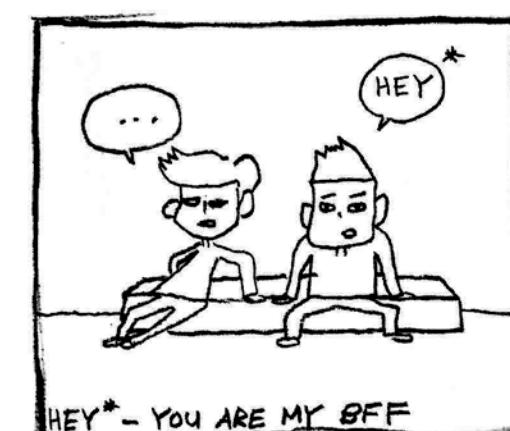
SKETCHY

by Dahyun Lee

- WHEN WE MEET FRIENDS



A cartoon illustration of two people hugging. The person on the left is wearing a striped shirt and has a speech bubble saying "WE SHOULD HANG OUT MORE OFTEN~". The person on the right is wearing a shirt and has a speech bubble saying "OH, I LIKE YOUR SHIRT~". Above them, the text "GIVE ME A HUG~" is written. There are flowers around them.



Techdoku

Solution, page 14

| | | | | | | | | |
|-----|-----|------|------|------|----|------|---|-----|
| 63x | | 20+ | | 18x | 2- | 60x | | |
| | 48x | | | | | 378x | | 6x |
| 12x | | 360x | | | | 8x | | |
| 30x | | | 168x | | | | | 8 |
| 21+ | | | | 23+ | | 36x | | 9 |
| 64x | | 378x | | | | 11+ | | 10x |
| | 9 | | | 5x | | | | |
| 3- | | 48x | | 432x | | | | 3- |
| 1 | | 9 | | 16+ | | | 5 | |

Instructions: Fill in the grid so that each column and row contains exactly one of each of the numbers 1–9. Follow the mathematical operations for each box.

Sudoku

Solution, page 14

A partially filled 9x9 Sudoku grid. The visible numbers are:

| | | | | | | | | |
|---|---|---|---|--|---|---|---|---|
| 7 | | | | | | 4 | | |
| 6 | | 3 | 2 | | | | | 1 |
| | 1 | 2 | | | 7 | | | 4 |
| 3 | | 9 | | | 1 | | | 6 |
| | 8 | | | | | | | 9 |
| | 2 | | | | 9 | | 3 | 8 |
| | 9 | | | | 3 | | 4 | 5 |
| 5 | | | | | | 2 | 8 | 7 |
| | | | | | 5 | | | 9 |

Instructions: Fill in the grid so that each column, row, and 3 by 3 grid contains exactly one of each of the digits 1 through 9.



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MA ballot questions

Not just asking about candidates

Ballot questions, from Page 1

repair shops already have access to similar information. They believe that this law would ultimately threaten consumer safety and cause prices of cars to rise.

In a departure from the typical ballot fare, Question 2, if enacted, could legally give citizens the right to assisted suicide. Terminally ill patients with less than six months to live would be able to request physicians to prescribe lethal medicine that would provide a "dignified death." Physicians carry a significant responsibility; they must fully inform the patient of his or her actions and arrange for courier services once the patient passes away. In order to provide dignity, the death certificate would be issued with the underlying disease as the cause of death. Proponents argue that this enacting this law would reduce the suffering of terminally ill patients, who would otherwise die in discomfort. However, detractors fear that suicide will become a substitute for healthcare.

Also concerning the medically ill, Question 3 would further liberalize medical marijuana use after its decriminalization in 2008, which allowed people to carry one ounce of cannabis. If the law is enacted, criminal and civil penalties of possessing medical marijuana would be eliminated. Patients with serious conditions such as HIV, Hepatitis C, and Parkinson's Disease would be allowed to have a 60-day supply of

marijuana for medical use. Marijuana would also be sold at state-regulated centers and in certain cases, patients would be allowed to grow marijuana in their homes. Supporters cite the relief medical marijuana provides for patients, while naysayers believe the vague language of "medical condition" will allow anyone to have access.

In addition, the City of Cambridge poses several non-binding questions on the ballot that influence the local congressmen. These questions are merely suggestions; Congressmen don't have to adhere to the results when they vote. The first question asks if the state senator should vote that marijuana be taxed and regulated like alcohol. The second question asks if the state representative should vote that companies are NOT entitled to the rights of individuals. Finally, the third question asks if the state representative should vote in favor of a resolution calling upon the president to prevent cuts to various social programs, raise taxes for middle class Americans, and close tax loopholes for large corporations. This last question has no official bearing on what will happen; it is merely a resolution "urging" the president, and not a bill.

The text of these questions can be found in the sidebar, and more information can be found online at <http://www.mass.gov/ago/government-resources/initiatives-and-other-ballot-questions/ballot-questions.html>.

Cambridge nonbinding questions

2nd Middlesex Senate District (#5)

Middlesex and Suffolk Senate District (#5)
Shall the state senator from this district be instructed to vote in favor of legislation that would allow the state to regulate and tax marijuana in the same manner as alcohol?

24th Middlesex Representative District (#6)

25th Middlesex Representative District (#5 in Wd. 4 Pct 1 & 3) (#6 in Wd. 4 Pct. 2, Wd. 6 Pcts. 2 & 3, Wds. 7 & 8, Wd. 10 Pcts. 1&2)

26th Middlesex Representative District (#6)

29th Middlesex Representative District (#6)

8th Suffolk Representative District (#5)

Shall the state representative from this district be instructed to vote in favor of a resolution calling upon Congress to propose an amendment to the U.S. constitution affirming that (1) corporations are not entitled to the constitutional rights of human beings, and (2) both Congress and the states may place limits on political contributions

and political spending?

24th Middlesex Representative District (#7)

29th Middlesex Representative District (#7)

Shall the state representative from this district be instructed to vote in favor of a resolution calling upon Congress and the President to: (1) prevent cuts to Social Security, Medicare, Medicaid, and Veterans benefits, or to housing, food and unemployment assistance; (2) create and protect jobs by investing in manufacturing, schools, housing, renewable energy, transportation and other public services; (3) provide new revenues for these purposes and to reduce the long-term federal deficit by closing corporate tax loopholes, ending offshore tax havens, and raising taxes on incomes over \$250,000; and (4) redirect military spending to these domestic needs by reducing the military budget, ending the war in Afghanistan and bringing U.S. troops home safely now?



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Delayed CityDays sees lower turnout

Organizers say moving the event from Orientation week negatively affected student participation

By Tushar Kamath

While previously a community service event involving only freshmen and some upperclassmen leaders during Orientation week, this year's CityDays was publicized as a service opportunity for the entire undergraduate and graduate community and took place on Oct. 9, the Tuesday of the long Columbus Day weekend.

189 students, only about half of whom were freshmen, represented 42 teams at CityDays.

CityDays was formally removed from the Orientation program this year, a change recommended by the Review Committee on Orientation (RCO). The RCO, commissioned by Deans Chris Colombo and Daniel Hastings PhD '80 to investigate all parts of Orientation, concluded that the spirit of integrating freshmen into the MIT community should extend past the designated week of Orientation. Pursuant to this goal, the RCO recommended that CityDays take place outside of Orientation week so that the whole campus could get involved in the community service. The committee also recommended cutting CityDays because it was not an activity or program "critical or fundamental to an orientation based on national research."

While the intent of the RCO when rescheduling CityDays was to increase participation around MIT, the overall turnout was negatively affected. In previous years, around 600 freshmen signed up during Orientation with about 200 upperclassmen acting as group leaders for the program. This year a total of 189 students, only about half of whom were freshmen, represented 42 teams and worked at 13 different local community organizations. According to Pratyusha Kalluri '16, one of this year's organizers, they planned for about 300 people to sign up and about 160 to participate.

Jemale D. Lockett '14 noted that there were "not as many freshmen who knew what CityDays was. Because it was more group-based, more upperclassmen participated." Lockett — who has participated in CityDays since his freshman year and worked this year on an 8 a.m. shift — said that "the atmosphere felt sort of dead."

This year's program focused on the idea of competing groups, a change from previous years in which mostly freshmen participated in unaffiliated groups. Participants were divided into four leagues: FSILGs (fraternities, sororities, and independent living groups), residence halls, athletic teams, and other (groups that could be formed on any other basis other than those already specified). Groups within each league volunteered in the "ServeOff," a competition to gain the most participa-

CityDays, Page 11

CityDays, from Page 10

tion from each group in which the winner would receive a \$400 grant from the MIT Public Service Center that could be used to fund future community service projects or to donate to a specific charity.

While volunteer numbers did drop, feedback polls from CityDays indicated positive results overall.

"Removing CityDays from Orientation definitely negatively affected the program," said Dorian A. Burks '14, the other organizer for this year's CityDays. "Having CityDays later, and with everyone already having their own schedules, there was less of an opportunity for student leaders to step in." In general, the planning for CityDays took place within a shorter time: "I was hired in July and Dorian was hired in August when, in the past, planning for the Orientation CityDays started at the beginning of the summer," said Kalluri.

In its inaugural year as a "ServiceOff," this year's winners of the \$400 grants were: Kappa Alpha Theta (FSILG), New House (residence halls), Women's Swimming and Diving (athletic teams), and the Freshman Urban Program (in "other"). Katalina J. Sher '14, the service and philanthropy director of Kappa

Alpha Theta, said, "We are going to invest the money into our service budget for the semester, which is used to register for future community service events. If we don't use that money for the semester, we plan on donating to our philanthropy, the Court Appointed Special Advocate (CASA) Association, a group that supports advocates for neglected or abused children."

While volunteer numbers did drop, feedback polls from CityDays indicated positive results overall. Burks added, "Even before CityDays this year, organizations have emailed me and asked for CityDays and how they loved working with students. This year, they said the students were very enthusiastic. Students have really enjoyed their organizations and would like to go back to the same organizations."

The PSC will be hosting a Spring semester version of CityDays.

"Looking forward, we are planning on having an IAP community service day, which is open to the whole of MIT," continued Burks. According to the current CityDays website, the Public Service Center will be hosting a Spring semester version of CityDays that may include lectures from faculty members or leaders of community service organizations and also incorporates both a service and educational aspect.

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Oct. 10, Fisher oral arguments heard

Supreme Court Justices discuss educational mission & diversity

Fisher, from Page 1

classrooms, your honor, what the university found was shocking isolation," Garre said to Alito.

But Garre refused to provide a specific number for the critical mass, saying that the Court had in fact previously struck down numerical quotas, and that there was no one number that would serve all contexts.

"At what point and when do we stop deferring to the university's judgment that race is still necessary? That's the bottom line of this case," Sotomayor pushed.

"Your honor, part of this is a judgment that the educators are going to make, but you would look to the same criteria," Garre said. "You would look to the criteria that we looked at, the enrollment data, the feedback from the students. We also took into account diversity in the classroom. We took into account the racial climate on campus." The standard to apply, according to Garre, is whether a

school has produced "an environment where cross-racial understanding is promoted, an environment where the educational benefits of diversity are realized."

MIT's joint amici brief argued for continued autonomy of schools when it came to making these judgments. The brief predicted that excessively specific judicial requirements would severely disrupt the schools' educational missions.

"Where is the end point?" asked Rein, who was given the last word. "We don't have critical mass because we don't know what it is and we refuse to say what it is." There is no judicial supervision, there is no strict scrutiny and there is no end point to what they are doing."

Schmill feels that affirmative action at MIT has produced the desired effect. "I hear from students all the time how much they appreciate MIT's diversity, and how much all our students feel their educational experience is enriched because of it."

Boston-area economics Nobel Recipients win for market design & matching theory

By Catherine Rampell

THE NEW YORK TIMES

Two Americans, Alvin E. Roth and Lloyd Shapley, were awarded the Nobel Memorial Prize in Economic Science on Monday for their work on market design and matching theory, which relate to how people and companies find and select one another in everything from marriage to school choice to jobs to organ donations.

Their work primarily applies to markets that do not have prices, or at least have strict constraints on prices. The laureates' breakthroughs involve figuring out how to properly assign people and things to stable matches when prices are not available to help buyers and sellers pair up.

Roth, 60, has put these theories to practical use, in his work on a program that matches new doctors to hospitals and more recently for a project matching kidney donors. Public school systems in New York, Boston, Chicago and Denver, use an algorithm based on his work to help assign students to schools. A professor at Harvard, he recently accepted a new position at Stanford.

"Al has spent the last 30 years trying to make economics more like an engineering discipline," said Parag Pathak, an economics professor at MIT who has worked on school matching systems with Roth. "The idea is to try to diagnose why resource allocation systems are not working, and how they can be engineered to produce something better."

Shapley, 89, a mathematician long associated with game theory, is a professor emeritus at the University of California, Los Angeles. He made some of the earliest theoretical contributions to research on market design and matching, in the 1950s

and 1960s.

In a paper with David Gale in 1962, Shapley explained how individuals could be paired together in a stable match even when they disagreed about what qualities made the right match. The paper focused on designing an ideal, perfectly stable marriage market: having mates find one another in a fair way, so that no one who is already married would want (and be able) to break off and pair up with someone else who is already married.

In the 1980s, Roth applied this work to matches for medical residency programs and eventually school choice. He was interested in how to keep matches fair and how to keep more sophisticated players from manipulating the system to their advantage.

In older matching systems, a student would apply to his first-choice school, which was often popular. If the student did not get in, then the application would be sent on to the student's second choice. But if that was also a popular choice, then that school's program would have already filled up by the time his application was even considered, and the process would repeat itself with his third-choice school and so on.

Even if students were qualified to get into one of their top schools, they could be shut out because they did not rank their preferences strategically. This created an incentive to try to game the system by listing a less popular school as their first choice because that way they would at least have a chance of getting in somewhere.

Roth designed a system in which students had an incentive to tell the truth about where they wanted to go. A centralized office could then assign them to a school best suited for

them, based both on their own preferences and the preferences of the schools they were applying to.

The school systems he helped create use a "deferred acceptance algorithm," which was developed by Shapley's theoretical work.

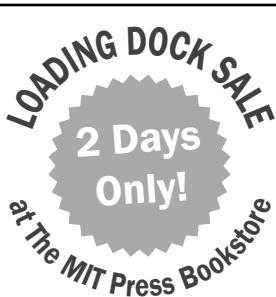
The system works by tentatively accepting students to their top-choice school. It holds off on the final assignment until it has gone through all the other applications to make sure there aren't other students who have a higher claim to a spot at that given school (because of higher test scores, a sibling at the school or whatever other criteria the school prioritizes), even if those students happened to rank the school lower on their list of preferences.

"The idea is to level the playing field," Pathak said. "You want to make sure that not only do sophisticated players not have to spend the time learning the strategies and different heuristics that will get them ahead, but also that unsophisticated players are not hurt by the fact that they are not aware of all this information."

Shapley was born in Cambridge, Mass. He received his bachelor's degree from Harvard and his a Ph.D. in mathematics at Princeton, where he studied alongside John Nash, a fellow Nobel laureate. He is married and has two sons.

Roth received his bachelor's from Columbia and his master's and doctorate from Stanford, all in operations research. He is also married with two children.

The Nobel in economic science is not one of the original prizes created by Alfred Nobel. It has been awarded each year since 1969 by the Royal Swedish Academy of Sciences. In addition to a medal and a diploma, the laureates collectively win a cash prize worth about \$1.2 million.



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UTexas to join edX initiative

9 universities, 6 health centers added to partnership

edX, from Page 1

UT system Chancellor Francisco G. Cigarroa emphasized how he believed edX could effectively but inexpensively improve education at the Texas universities. There was a notably lesser focus on how edX courses could provide cheap or free education on a global scale — an idea that got the spotlight when MITx was announced late last year, and when Harvard and MIT announced the formation of edX.

"We are excited about this partnership with edX and honored to be in the company of such exceptional institutions as MIT, Harvard, and Berkeley. The mission of edX aligns perfectly with that of the UT system and keeps the learner as its central focus," said Cigarroa. EdX "will allow us to diagnose and address student learning difficulties more easily" and "help them graduate on time," he added.

The UT system ultimately decided on edX because it is non-profit and run by academics.

UT system officials said their universities would use a "blended model" of education, in which courses and degrees would be a combination of online and in-person components. Development of the "blended model" and pedagogical research would happen through UT's Institute for Transformational Learning, founded this year to improve educational outcomes, raise graduation rates, lower costs, and improve college readiness in Texas.

The efforts to improve outcomes and lower costs come in part as a response to pressure from Texas Governor Rick Perry that public universities offer cheaper degrees.

"We view this partnership with edX as an incredible opportunity to give our students access to the highest quality courses in the world," said UT Brownsville President Julia Garcia. "[We] also seek to improve large gateway classes that see high rates of student failures."

The UT system announcement marked the first time edX was concretely and repeatedly described as a way for other American universities to give its students access to courses previously taken only by Harvard, MIT, or Berkeley students.

"This is a plan that is sustainable," said Gene Powell, chairman of the UT Board of Regents. "We will keep 100 percent of our revenue, and we will better meet the learning needs of a wide range of students."

The UT System hopes to offer at least four courses on edX by Fall 2013, though it is not yet clear whether UT students will immediately be able to get degree credit from them. Eventually, UT students would be able to pick edX courses from any other school in the system, or take courses offered by Harvard, MIT, or other universities that join the platform.

"EdX courses are *not* Internet versions of old-fashioned correspondence courses," said Cigarroa. Any edX courses from UT schools would need to meet standards of rigor, but those standards were not specified.

And though UT system officials strongly indicated the partnership with edX was principally to improve its own educational programs, they

did touch on a global education component. David Callender, president of the UT Medical Branch at Galveston, said that the UT health institutions were eager to use edX to offer medical, nursing, and healthcare courses for worldwide consumption.

EdX is hardly the only game in town when it comes to MOOCs — Massive Open Online Courses. Coursera, a for-profit started by Stanford University professors earlier this year, has partnered with 33 universities to offer nearly 200 courses via a platform similar to edX. Udacity, co-founded by Stanford professor and Google engineer Sebastian Thrun, offers 14 courses, mostly in computer science.

The edX spring courses will include subjects on history, law, and justice.

Cigarroa said the UT system considered alternatives, but ultimately decided on edX because it is non-profit, run by academics, open-source, and "aligned with our vision" for a "blended model" of education. "We wanted to make sure production quality was high," he added, citing confidence in MIT/Harvard's leadership. (EdX is not yet open-source, but its backers have promised that at some point it will be.)

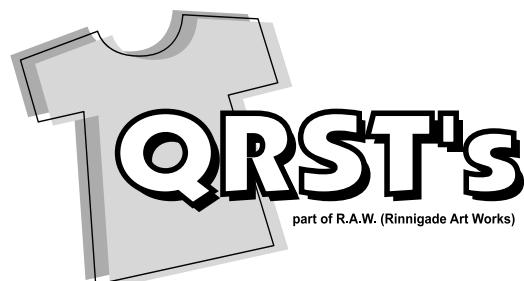
At Monday's press conference, Agarwal said that edX will be announcing its spring lineup of courses in the coming weeks, which will include subjects on history, law, and justice. Those courses would complement the seven that edX already offers, most of them about computer science and electrical engineering.

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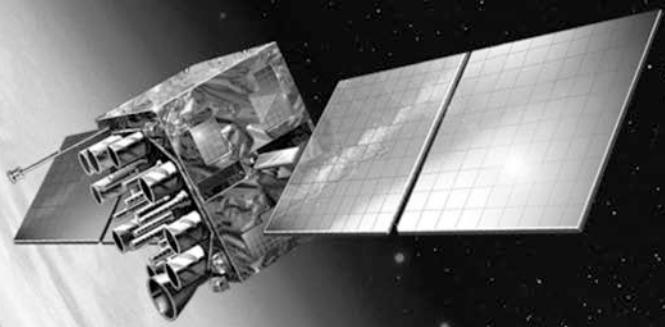
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Demolition, from Page 1

and start digging in the area, which should be done by the end of the calendar year. This work is to replace the site with more suitable soil for the day-care. Foundation and utilities work will go through March, and in April the construction of the new building will begin. The building is modular, and pieces of the structure will be manufactured elsewhere and mailed to MIT for a rapid assembly — ideally by the end of June.

"That's the plan," said Amster. "It's always subject to change if there are issues that occur outside of our control."

The center, which will open

126 daycare spots on campus, will more than double the number of child care slots on campus, which is currently at 142. The construction was made possible by a donation from David H. Koch '62 and Charles W. Johnson '55 and Jennifer Johnson.

"When we're doing project we always try to be good neighbors," Amster said. "People should know to get in touch with Richard Quade, our senior project manager. If people have issues let us know what they are and we will try to address them."

Richard Quade can be reached at rquade@plant.mit.edu.

—Jessica J. Pourian

Solution to Techdoku from page 7

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 9 | 1 | 8 | 7 | 2 | 6 | 5 | 4 | 3 |
| 7 | 8 | 6 | 5 | 9 | 4 | 3 | 2 | 1 |
| 3 | 4 | 2 | 1 | 5 | 9 | 8 | 7 | 6 |
| 5 | 6 | 4 | 3 | 7 | 2 | 1 | 9 | 8 |
| 6 | 7 | 5 | 4 | 8 | 3 | 2 | 1 | 9 |
| 2 | 3 | 1 | 9 | 4 | 8 | 7 | 6 | 5 |
| 8 | 9 | 7 | 6 | 1 | 5 | 4 | 3 | 2 |
| 4 | 5 | 3 | 2 | 6 | 1 | 9 | 8 | 7 |
| 1 | 2 | 9 | 8 | 3 | 7 | 6 | 5 | 4 |

Solution to Sudoku from page 7

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 7 | 5 | 8 | 1 | 6 | 4 | 9 | 2 | 3 |
| 6 | 4 | 3 | 2 | 5 | 9 | 7 | 8 | 1 |
| 9 | 1 | 2 | 3 | 7 | 8 | 5 | 4 | 6 |
| 3 | 7 | 9 | 8 | 1 | 5 | 2 | 6 | 4 |
| 4 | 8 | 6 | 7 | 2 | 3 | 1 | 9 | 5 |
| 1 | 2 | 5 | 4 | 9 | 6 | 3 | 7 | 8 |
| 8 | 9 | 7 | 6 | 3 | 1 | 4 | 5 | 2 |
| 5 | 6 | 1 | 9 | 4 | 2 | 8 | 3 | 7 |
| 2 | 3 | 4 | 5 | 8 | 7 | 6 | 1 | 9 |

Solution to Crossword from page 6

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C | H | A | D | A | L | A | M | O | H | A | C | K |
| L | I | M | O | R | E | C | A | P | O | N | H | N |
| E | L | M | O | M | A | D | R | E | W | A | N | D |
| F | L | O | R | A | S | C | E | N | T | S | | |
| S | T | E | T | R | O | O | S | T | S | | | |
| R | E | I | S | Z | G | L | O | W | E | | | |
| A | M | P | L | E | A | R | I | A | T | | | |
| D | O | L | A | S | D | A | N | C | E | | | |
| A | R | E | S | T | O | E | N | T | S | | | |
| A | R | E | S | T | O | E | N | T | S | | | |
| R | Y | E | P | S | T | P | A | R | S | | | |
| S | U | N | D | A | E | P | O | S | Y | | | |
| F | L | E | X | A | I | M | K | S | S | | | |
| D | E | L | I | R | O | T | O | R | E | | | |
| R | I | F | E | Y | E | S | E | S | D | | | |

SMBC, from Page 7



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SPORTS SHORT**Men's Tennis victorious in second season match**

MIT Men's Tennis defeated Nichols College, 6-3, on Saturday afternoon making them 2-0 for the season. Though Edwin M. Zhang '14 and Matthew T. Skalak '13 had a tough 8-9 loss, sophomore Eugene S. Oh and junior Curtis L. Wu picked up an 8-6 win and seniors Tymor C. Hamamsy and Brian K. Oldfield won their match with a score of 8-1. Heading into singles with a 2-1 lead,



the Engineers finished off the match strong. Zhang clinched a win against Nichols with a 6-3, 6-3 score. Though Oh ultimately lost his singles match, Oldfield had an impressive win of 6-3, 6-0. Followed by yet another win by Skalak of 6-4, 6-4 and Jeffrey R. Bu '15 with a 6-1, 6-0 result, MIT secured the win against Nichols. MIT Men's Tennis will host its next match against Eastern Nazarene College on Feb. 26.

—Felicia Hsu, Sports Staff

UPCOMING HOME EVENTS

Tuesday, October 16

Women's Tennis vs. Wheaton College
Field Hockey vs. Wheaton College

4:00 p.m., duPont Tennis Courts
6:00 p.m., Jack Barry Field

Wednesday, October 17

Sailing vs. Midweek Tech Invite 2

4:00 p.m., Charles River

Field hockey dominates

Brings MIT's conference record up to 5-1

By Mindy Brauer
DAPERSTAFF

A solid defensive performance coupled with a second-half goal was all MIT

needed in its 1-0 victory over the Springfield College Pride in a NEWMAC field hockey game on Saturday morning. Kimberly A. Barker '13 provided the lone marker that was set up by Elizabeth A. Dethy '15. Sophomore goalie Jenna R. Klein stopped the only shot on goal she faced in her second career shutout as the Engineers improved to 12-2 on the year and 5-1 in conference play.

MIT controlled the first half as it registered a 14-0 advantage in shots and a 10-0 margin in penalty corners. Freshman goalie Timarie Villa kept the Pride in the game as she racked up 10 saves in the opening frame.

The Engineers continued to attack and eventually broke through in the 42nd minute. Siobhan K. Rigby '16 took a penalty corner that led to a shot by senior Molly E. McShane which was stopped by

Villa. Dethy corralled the rebound and sent a cross past Villa's outstretched stick where Barker poked in the game-winner at the back post.

The Engineers continued to attack and eventually broke through in the 42nd minute.

Springfield responded with two penalty corners and a shot that was blocked, marking its first offensive charge of the day. The game became a back-and-forth affair as junior Kelly Gallo put the Pride's only shot on net with 16:13 left to play. The hosts were awarded three penalty corners down the stretch but they could not record the equalizer. MIT nearly tacked on an insurance goal with 1:16 on the clock; however, Villa denied a bid by McShane.

MIT begins a three-game homestand on Tuesday, Oct. 16 against NEWMAC rival Wheaton College.

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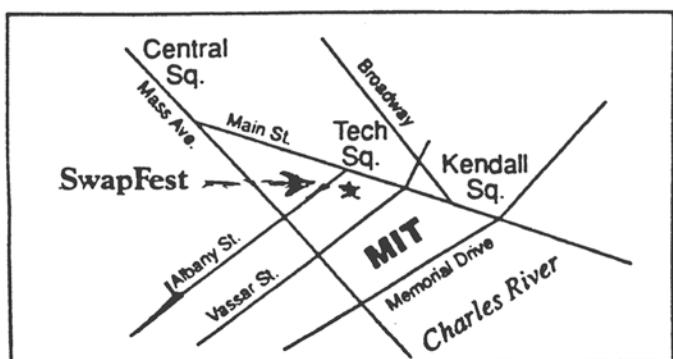
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```
def learnMarketableJobSkills():
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if you.interest == True:
    print "E-mail join@tech.mit.edu"
```